

CLAIMS

1. A method of aggregating data in an information management system, the method comprising:
 - receiving a query for a response to a search on a database;
 - loading data from the database into a memory if the data necessary to generate the response to the query is absent from the memory;
 - filtering the data based on the query to generate a list of results;
 - buffering at least one key figure corresponding to a result in the list of results;
 - buffering at least one dimension value corresponding to each key figure;
 - aggregating the dimension values to generate an aggregate key;
 - aggregating key figures corresponding to the same aggregate key to generate one or more aggregate key figures; and
 - displaying the response to the search on a display device, wherein the response includes at least one aggregate key figure.
2. A method in accordance with claim 1, the method further comprising
 - generating a hash key based on the aggregate key; and
 - storing in a hash table aggregate key figures corresponding to the hash key.
3. A method in accordance with claim 1, wherein loading data from the database into a memory comprises compressing data according to a compression algorithm.
4. A method in accordance with claim 3, wherein the compression algorithm is dictionary-based compression.
5. A method in accordance with claim 1, wherein loading data from the database comprises loading data into a plurality of memories.
6. A method in accordance with claim 1, wherein filtering the data based on the query is performed blockwise.

7. A method in accordance with claim 1, wherein loading data from the database into a memory comprises organizing the data in the memory as columns of the database.
8. A method in accordance with claim 1, wherein aggregating the dimension values comprises concatenating the dimension values.
9. An information management system, the system comprising:
 - a database; and
 - a computer system programmed to:
 - load data from the database into a memory, wherein the data represents a table;
 - filter the data based on a query, wherein filtering the data comprises generating a list of results;
 - buffer at least one key figure corresponding to a result in the list of results;
 - buffer at least one dimension value corresponding to each key figure;
 - generate an aggregate key based on the dimension values;
 - aggregate key figures with the same aggregate key to generate one or more aggregate key figures; and
 - display at least one aggregate key figure on a display device.
10. An information management system in accordance with claim 9, wherein the computer system is further programmed to:
 - generate a hash key based on the aggregate key; and
 - store in a hash table aggregate key figures corresponding to the hash key.
11. An information management system in accordance with claim 9, wherein the operation of loading data from the database into a memory comprises compressing data according to a compression algorithm.
12. An information management system in accordance with claim 11, wherein the compression algorithm is dictionary-based compression.

13. An information management system in accordance with claim 9, wherein the operation of loading data from the database comprises loading data into a plurality of memories.

14. An information management system in accordance with claim 9, wherein the operation filtering the data based on the query is performed blockwise.

15. An information management system in accordance with claim 9, wherein the operation of loading data from the database into a memory comprises organizing the data in the memory as columns of the database.

16. An information management system in accordance with claim 9, wherein the operation of generating an aggregate key comprises concatenating the dimension values.